

### **AMENDMENTS TO THE CLAIMS**

The text of all pending claims, as amended herein, along with their current status, is set forth below in accordance with 37 C.F.R. § 1.121.

#### **Listing of Claims:**

1-20. *(Cancelled)*

21. *(Currently amended)* A method for increasing the rise time of air bubbles emitted from a diffuser in water for the purpose of suppressing noise in a marine seismic survey, said method comprising the step of introducing into the diffuser, before use in water to suppress noise in the marine seismic survey, a chemical additive having bubble coalescence retardation properties or wetting agent properties or both.

22. *(Currently Amended)* The method of claim 21, wherein the chemical additive is coated on to the diffuser and allowed to set before use in water to suppress noise in the marine seismic survey.

23. *(Withdrawn)* The method of claim 21, wherein the chemical additive is mixed into the diffuser during fabrication.

24. *(Previously Presented)* The method of claim 22, wherein the chemical additive has bubble coalescence retardation properties.

25. *(Previously Presented)* The method of claim 24, wherein the diffuser is a perforated hose.

26. *(Previously Presented)* The method of claim 25, wherein the perforated hose is made from a polymeric material.

27. *(Cancelled)*

28. *(Previously Presented)* The method of claim 26, further comprising the step of preconditioning the hose by soaking it in water before coating it.

29. *(Previously Presented)* The method of claim 28, wherein the water is salt water.

30. *(Previously Presented)* The method of claim 28, further comprising bubbling the hose while soaking it.

31. *(Previously Presented)* The method of claim 29, wherein the chemical additive is a poly(oxyalkylene) block copolymer composed of ethylene oxide (EO) and propylene oxide (PO) blocks having any of the following general structures:  $(EO)_x(PO)_y(EO)_x$  and  $(PO)_y(EO)_x(PO)_y$ , where  $x$  is in the approximate range 2-128 and  $y$  is in the approximate range 16-67.

32. *(Previously Presented)* The method of claim 31, wherein the chemical additive is chosen from among the following: Pluronic L81, Pluronic L62, Pluronic L64, and Pluronic 25R2.

33. *(Previously Presented)* The method of claim 32, wherein the chemical additive is Pluronic L81.

34-42. *(Cancelled)*

43. *(New)* The method of claim 22, wherein the chemical additive is Exxal-13 diluted in ethanol.

44. *(New)* The method of claim 22, wherein the chemical additive is chosen from among the following: 2-ethyl-1-hexanol, octanol, Exxal-8, Exxal-9, Exxal-13, and sodium dodecyl sulfate.

45. *(New)* The method of claim 22, wherein the chemical additive is a poly(oxyalkylene) block copolymer composed of ethylene oxide (EO) and propylene oxide (PO) blocks having any of the following general structures:  $(EO)_x(PO)_y(EO)_x$  and  $(PO)_y(EO)_x(PO)_y$ , where  $x$  is in the approximate range 2-128 and  $y$  is in the approximate range 16-67.

46. *(New)* The method of claim 45, wherein the chemical additive is chosen from among the following: Pluronic L81, Pluronic L62, Pluronic L64, and Pluronic 25R2.

47. (New) The method of claim 22, wherein the diffuser is a perforated hose made from polymeric or elastomeric material.
48. (New) The method of claim 22, further comprising the step of preconditioning the diffuser by soaking or bubbling it in fresh or salt water before coating it.
49. (New) The method of claim 22, further comprising the steps of operating the diffuser in water followed by recoating the diffuser with the chemical additive.
50. (New) The method of claim 23, wherein the diffuser is a perforated rubber and linear low density polyethylene (LLDPE) hose and the additive is introduced in pellets comprised of Pluronic L81 blended into LLDPE, Polyvel VF-150 fatty glyceride wetting agent concentrate, or Polyvel VW-351 functionalized silicone wetting agent concentrate.
51. (New) The method of claim 21, wherein the chemical additive is formed by mixing a first additive having bubble coalescence retardation properties with a second additive having wetting agent properties.
52. (New) The method of claim 22, wherein the chemical additive is applied to the diffuser's surface with a brush.